



February 19, 2025

Submitted through <https://www.regulations.gov>

Mr. Charles Lee
Office of Environmental Justice and External Civil Rights (2201A)
Environmental Protection Agency
1200 Pennsylvania Ave NW, Washington DC
20460-0001

RE: Interim Framework for Advancing Consideration of Cumulative Impacts; Request for Comments [EPA-HQ-OLEM-2024-0360]

Dear Mr. Lee:

The Alliance for Automotive Innovation (Auto Innovators)¹ appreciates the opportunity to provide comments on EPA's Interim Framework for Advancing Consideration of Cumulative Impacts ("the Interim Framework").² Auto Innovators represents the full auto industry, including the manufacturers producing most vehicles sold in the U.S., equipment suppliers, battery producers, semiconductor makers, technology companies, and autonomous vehicle developers. Our mission is to work with policymakers to realize a cleaner, safer, and smarter transportation future and to ensure a healthy and competitive auto industry that supports U.S. economic and national security.

EPA's request for comment on the Interim Framework provides a constructive opportunity to not only comment on the process that EPA has developed but also to pose questions that, when addressed, will help to clarify how such an assessment will inform environmental decisionmaking in a meaningful manner.

We understand that the key goals of the Interim Framework are to:

- More fully and accurately characterize the realities communities face.
- Pinpoint the levers of decision-making and identify opportunities for interventions that improve health and quality of life while advancing equity.
- Increase meaningful engagement, improve transparency, and center actions on improving health and environmental conditions in communities.³

We further understand that EPA proposes to be guided by:

- Centering cumulative impacts work on improving human health, quality of life, and the environment in all communities.

¹ Auto Innovators represents the full auto industry, including the manufacturers producing most vehicles sold in the U.S., equipment suppliers, battery producers, semiconductor makers, technology companies, and autonomous vehicle developers. Our mission is to work with policymakers to realize a cleaner, safer, and smarter transportation future and to ensure a healthy and competitive auto industry that supports U.S. economic and national security. Representing approximately 5 percent of the country's GDP, responsible for supporting nearly 10 million jobs, and driving \$1 trillion in annual economic activity, the automotive industry is the nation's largest manufacturing sector. www.autosinnovate.org.

² Available at <https://www.regulations.gov/document/EPA-HQ-OLEM-2024-0360-0004>.

³ Interim Framework at 9-10.

- Focusing on the disproportionate and adverse burden of cumulative impacts.
- Applying a fit-for-purpose approach to assessing and addressing cumulative impacts.
- Engaging communities and incorporate their lived experience.
- Using available data and information to make decisions and take action.
- Operationalizing and integrating ways to consider and address cumulative impacts.⁴

Our comments and questions focus on the limitations that we see reflected in the Interim Framework, including:

- A. Limited Data Availability on Combined Exposures and Limited Assessment Tools
- B. Data Comparability: Challenges in Understanding Complex Interactions Between Stressors
- C. How Risk-Based Statutes Such as TSCA Will Interpret and Use Non-Chemical Data
- D. Lifestyle Choices Beyond the Control of Regulations

A. Limited Data Availability on Combined Exposures and Limited Assessment Tools

At this point in time there appears to be a scarcity of databases and sources that identify and combine multiple sources of exposure to specific chemicals in a meaningful way, as well as a limited set of models that can be used to assess cumulative exposures. In EPA’s 2003 Framework for Cumulative Risk Assessment, EPA acknowledged that:

Cumulative risk assessments will identify the need for many different kinds of data, some of which are not commonly used in current risk assessment—and they will often demand large quantities of such data. Until such data can be provided, identification of critical information and research needs may be the primary result of many cumulative risk assessment endeavors.⁵

While there are models that can provide a structure for estimating cumulative exposures⁶ to chemicals, models for estimating exposures to non-chemical stressors, such as those identified in the Interim Framework (lifestyle choices, diet, etc.) are less well-developed and scarcer.

Cumulative exposures can be assessed using similar tools (e.g., APEX, CALENDEX). Fewer tools are available for non-chemical stressors, although some guidelines and resources have been developed by EPA and other groups.⁷

Consequently, while one of the basic principles of the Interim Framework is “using available data and information to make decisions and take action,” it is unlikely that reliable data or cumulative

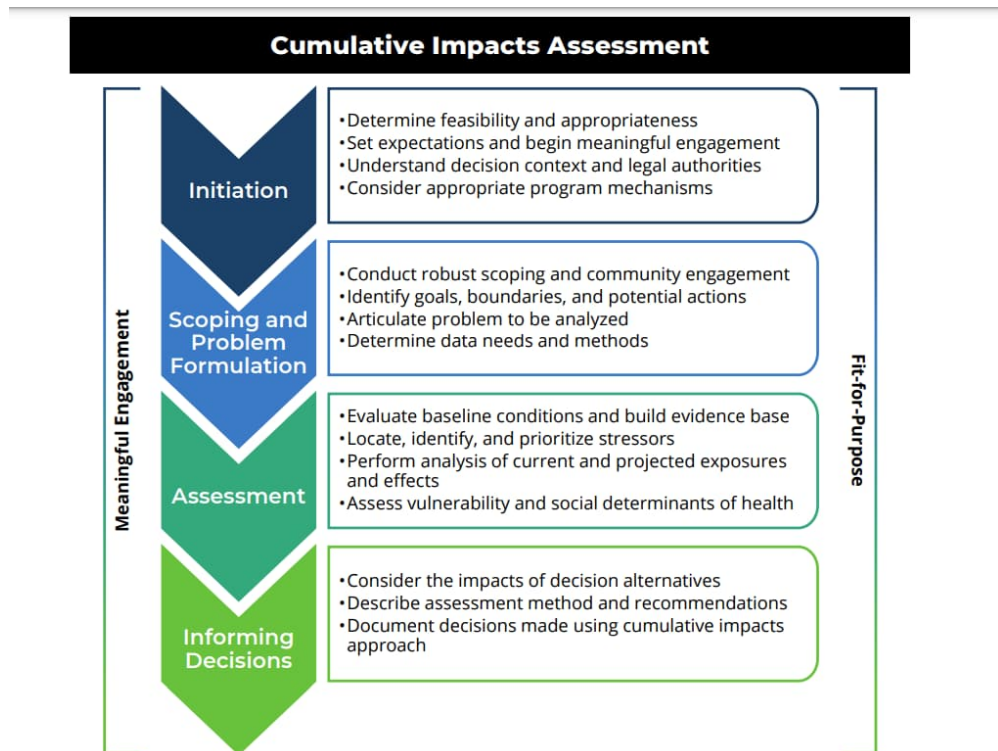
⁴ <https://www.epa.gov/cumulative-impacts/interim-framework-advancing-consideration-cumulative-impacts>.

⁵ U.S. Environmental Protection Agency, Framework for Cumulative Risk Assessment (May 2003) at xii, available at https://www.epa.gov/sites/default/files/2014-11/documents/fmwrc_cum_risk_assmnt.pdf.

⁶ Data to run these models is limited at this time.

⁷ *Exposure Assessment Tools by Tiers and Types - Aggregate and Cumulative*, U.S Environmental Protection Agency, https://19january2021snapshot.epa.gov/expobox/exposure-assessment-tools-tiers-and-types-aggregate-and-cumulative_.html.

assessment models exist to carry out steps 1 through 4 of the cumulative assessment process envisioned by EPA.⁸



Interim Framework at 13.

B. Data Comparability: Challenges in Understanding Complex Interactions Between Stressors

Cumulative impacts are the totality of exposures, and resultant impacts, to combinations of environmental stressors and their effects on health and quality of life outcomes.

- Chemical stressors are compounds that are released into the environment by waste, emissions, pesticide use, or use of consumer products and can change or damage living organisms or ecosystems.
- Nonchemical stressors are factors in the built, natural, and social environments, including climactic stress that directly or indirectly affect health or increase vulnerability.⁹

The Interim Framework further states that:

⁸ Interim Framework at 13.

⁹ U.S. Environmental Protection Agency, Fact Sheet: Interim Framework for Advancing Consideration of Cumulative Impacts, available at https://www.epa.gov/system/files/documents/2024-11/epa-fact-sheet_interim-framework-for-advancing-consideration-of-cumulative-impacts-november-2024_1.pdf.

Adverse consequences include exposures to environmental contaminants or hazards (e.g., air pollution, hazardous waste, water pollutants, chemicals in commerce, climate change impacts), social stressors (e.g., historical redlining, poverty), and limited access to environmental benefits (e.g., tree canopy, clean drinking water) and other resources (e.g., access to health care, nutritious food, safe housing) necessary for a healthy, robust life.¹⁰

EPA recommends that, for a cumulative assessment, data and analysis could include:

- Combined impacts across multiple chemical and nonchemical stressors, including climactic and natural hazard stressors
- Multiple exposure pathways across media
- Community vulnerability, sensitivity, adaptability, and resilience
- Cultural and subsistence practices and behaviors
- Ecological characteristics and assessment points
- Exposures to stressors in the relevant past and future, especially during vulnerable life stages
- Identifying priority adverse and health-promoting effects and outcomes of interest
- Distribution of environmental burdens and benefits
- Individual variability and behaviors
- Health and well-being benefits and mitigating factors
- Uncertainty and variability associated with data and information.¹¹

While identifying the myriad of exposures to be considered in a cumulative assessment, EPA does not offer any process or model that would demonstrate how significantly different types of exposures could be normalized in a way that would allow them to be aggregated in a way that would result in an estimate of overall risk. For example, the Interim Framework does not provide guidance on how the estimation of risk for a specific chemical, e.g., 2×10^{-6} could/would be combined with an estimation of the risk posed by climate change, personal preferences such as smoking, or dietary preferences that may pose a risk. To further complicate a cumulative estimate of risk, the Interim Framework suggests that past risks could be incorporated into a risk finding, with no guidance on how such data would be collected.

In brief, while the Interim Framework identifies a wide array of potential risk factors, it is missing the critical analysis of how individual disparate stressors would be assessed and their individual risks accumulated into one risk-based finding.

C. How Risk-Based Statutes Such as TSCA Will Interpret and Use Non-Chemical Data

It is unclear which legislative authorities or statutes EPA would use to issue a regulation based on a cumulative risk assessment. The statutes that EPA administers are for the most part media-specific and rely on the use of quantitative chemical-specific hazard and exposure data to estimate risk and develop appropriate risk management strategies.

¹⁰ Interim Framework at 6.

¹¹ Interim Framework at 21.

As presented in the previous section, the science as to how a risk assessor would quantify different types of exposures has not yet been developed in a sound scientific manner. Additionally, but equally important, the Interim Framework offers no guidance as to how the hazard of a non-chemical stressor should be characterized. For example, a chemical stressor can be characterized as a carcinogen or a teratogen, but how would the hazards associated with climate change be characterized, even if exposure to such a hazard could be assessed and assigned a quantitative value?

As a consequence, it is unclear what EPA-administered statute would be used to mitigate any risk(s) associated with a cumulative risk assessment. If EPA were to choose to use a combination of its statutes, there still remains the issue that these statutes were not designed or crafted in a broad enough scope to consider the types of non-chemical stressors envisioned by the Interim Framework.

D. Lifestyle Choices Beyond the Control of Regulations

A final comment cautions that any framework for estimating risk needs to be mindful of individual lifestyle choices that fall outside of the purview of government regulation.

In conclusion, we fully support the development of a framework that adds more precision, transparency, and accuracy to the assessment of environmental and human health risks. However, the Interim Framework put forward by EPA at this point goes beyond the reach of current environmental statutes and, at best, is in its infancy in terms of development and deployment. As presented, the Interim Framework does not have a sound process for how to evaluate cumulative exposures and risks and should not move forward until significant changes are made. We believe that the issues we have raised in these comments need to be carefully considered, along with many others that will undoubtedly arise in the Interim Framework's development.

Thank you for your consideration of our comments. We welcome any additional discussion or questions regarding this submission.

Sincerely,



Catherine Palin
Alliance for Automotive Innovation